

## Curriculum Vitae

Charles B. Salemi

### Education:

University Of Massachusetts Amherst Ma.  
Bachelor of Science- Zoology 1973

### Experience:

2003-present: Chief of Laboratory for the Jamaica Plain site of the Massachusetts Department of Public Health Drug Analysis Laboratory. Oversee and supervise the operations of the Laboratory and Evidence Office. Served as the Department of Public Health's representative on the Commonwealth of Massachusetts Forensic Science Advisory Board 2005-2006.

1980-2003: Served as Chemist 2, 3, and Laboratory Supervisor 1, in the Jamaica Plain Drug Analysis Laboratory. Duties included: analyzing unknown substances and submitting reports to the courts of Massachusetts, developing methods used in the analysis of illicit substances, responsible for the training of new chemists in the laboratory, overseeing the QA/QC program for the laboratory.

1974-1980: Served as a Bacteriologist 1 in the Department of Public Health Food and Drug Laboratory. Duties included the testing of retail food products, to insure microbiological and chemical compliance to the food sanitation code of the Commonwealth of Massachusetts.

### Additional training:

- Appointed Assistant Analyst for the Department of Public Health -1982
- Completed training course in methods of drug analysis given by the Federal Drug Enforcement Agency (DEA) in McLean Va. 1983.
- Completed training in the use of Fourier Transform Infrared Spectroscopy conducted at the Analect Instrument training facility 1984.
- Completed workshop in Solid Phase Extractions conducted by Baker Chemical 1984.
- Completed training in Polarized Light and Chemical Microscopy Techniques conducted by the Northeastern Association of Forensic Scientists (NEAFS) 1986.
- Completed workshop in Clandestine Laboratories (NEAFS) 1990.
- Completed training course in Capillary Gas Chromatography conducted by Hewlett-Packard 1991.
- Post Graduate Courses in Instrumental Chemical Analysis-Northeastern University 1982, and Human Toxicology, Harvard University 1983.
- Testified as an expert witness in numerous drug analysis cases in State and Federal Court.

### Organizations:

Member of the following:

- Massachusetts Organization of State Engineers and Scientists
- Northeastern Association of Forensic Scientists ( NEAFS)
- American Chemical Society

## Curriculum Vitae

### Della Saunders

#### **Education:**

Boston University Boston, MA. Bachelors of Arts in Chemistry 1982

#### **Experience:**

**1985-present:** Currently Chemist III Massachusetts Department of Public Health Drug Analysis Laboratory at State Laboratory Institute Boston, MA. Responsible for analyzing unknown substances submitted by Massachusetts law enforcement agencies; operating, maintaining, and interpreting data from analytical equipment (analytical balance, microscope, gas chromatogram, ultraviolet spectrometer, infrared spectrometer, gas chromatogram/mass spectrometer); training junior level chemists; providing expert testimony to local, state, and federal courts in the Commonwealth of Massachusetts.

**1984-1985:** Laboratory Technician in the Media Laboratory at State Laboratory Institute Boston, MA. Responsible for making chemical reagents and media plates; operating and maintaining laboratory equipment (autoclave, pH meter, ultra-violet hood), and collecting safety data for laboratory protocols.

#### **Training:**

**1985:** Six week training with Senior Staff at Massachusetts Department of Public Health (MDPH) Drug Analysis Laboratory Boston, MA. Appointed Assistant Analyst MDPH

**1987:** One week training course in drug analysis given by the Federal Drug Enforcement Agency (DEA) McLean, VA.

**1992:** Training in Gas Chromatograph/Mass Spectroscopy (GC/MS) Hewlett Packard (Agilent)

**1996:** Training in Fourier Transform Infra-Red Spectroscopy ETA (Analect)

**2001:** Expert Witness Workshop National Laboratory Training network Quality Assurance/Quality Control Training (MDPH)

**2002:** Techniques of Supervision Training (MDPH)

**1999:** Notary Public Commonwealth of Massachusetts

## Curriculum Vitae

### Michael Lawler

#### **Education:**

University of Virginia, Charlottesville, Va. Bachelor of Arts in English, 1975

Harvard University, Cambridge, Ma. Master of Arts in biology, 1995

#### **Experience:**

**1990-present** currently Chemist III, Mass. Dept. of Public Health, Drug Lab analyst determining the identity of unknown substances and providing expert testimony in the Courts. Conduct special testing for poisons within drug exhibits. Lab Safety Officer.

**2005-2008** lecturer in chemistry, Curry College, Milton, Ma.

**1988-1990** New England Newborn Screening (NENS) Biochemist conducting pilot studies and validation trials of new newborn screening tests. Investigator and co-author of papers noted below. Introduced screening test for Biotinidase Deficiency. Liaison with interstate collaborators in national studies.

**1983-1988** Supervised NENS urine screening lab for metabolic disorders. Conducted research in collaboration with Children's Hospital (Boston) detecting neuroblastoma, a cancer of early childhood. Conducted reference testing for rare metabolic disorders for an international audience.

**1982-1983** NENS hypothyroid assay technologist with Tuft's University

**1979-1981** Mass. Bay Community College, staff technologist preparing materials for the laboratory technician program, which included reagents, apparatus and maintaining stock cultures of human pathogens.

#### **Additional education and special training**

Drug Analysis, completed six week training course by senior staff within the Department of Public Health Drug Analysis Laboratory

National Laboratory Network Training Program course as Expert Witness

Qualified as an expert witness in the Massachusetts Courts and the U.S. District Court  
Current Drug Trends – Multijurisdictional Drug Task Force Academy

CDC course in antibiotic resistance CDC course in cell culture

CDC course in public health response to bioterrorism

U.S. Army course in biologic warfare and terrorism

#### **Journal Publications**

***Screening***, 1992, 1:34-37; Lawler,M., Frederick,S., Rodriguez-Anza, S., Wolf,B., Levy,H., *Newborn Screening for Biotinidase Deficiency, Pilot Study and Follow-up of Identified Cases*

***Genetic Screening***, 1990, 11-18, Mitchell,M., Lawler,M., Walraven,C., Hermos,R., *To Screen or Not to Screen for Congenital Hyperplasia: Is that the Question?*

***The Journal of Pediatrics***, 116: 78-83, Secor-McVoy,J., Lawler,M., Schmidt, M., Ebers,D., Hart,P., Pettit,D., Blitzer,M., Wolf,B., *Partial Biotinidase Deficiency: Clinical and Biochemical Features*

#### **Professional Affiliations**

Northeastern Association of Forensic Scientists (NEAFS) since 2005

#### **Awards**

Theobald Smith Education Grant for graduate studies

# Curriculum Vitae

Mai Ngoc Tran

Education: M.S. Medicinal Chemistry, Northeastern University, Mass. Graduated 1990. Coursework included: organic & inorganic chemistry, physical chemistry, qualitative and quantitative chemistry, analytical and advanced organic chemistry.

## Employment

2001-Present: Chemist II State Laboratory Institute

Massachusetts Department of Public Health, Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts harmful and narcotic drug laws.

1986-2001: Chemist I State Laboratory Institute

Massachusetts Department of Public Health, Drug Analysis Laboratory.

- Responsible for the identification of substance to determine violation of the Massachusetts harmful and narcotic drug laws.
- Trained in the use of analytical instrumentation for the purpose of performing forensic drug analysis.
- Successfully completed a six-week training course in the analysis of drugs by senior staff of the Department of Public Health Drug Analysis Laboratory Senior staff.
- Appointed an assistant analyst for the Department of Public Health in 1986.

1982-1986: Lab Technician-State Laboratory Institute

- Prepared reagents, Blood agar plates.

## Curriculum Vitae

Elisabeth O'Brien

### Education:

Bachelor of Science, Biology; May 1988  
Bates College, Lewiston, Maine

### Experience:

Lab Supervisor I William A. Hinton State Laboratory Institute, Drug Analysis Laboratory  
March 2009-present

\*Responsible for oversight of the Massachusetts Department of Public Health Boston Drug Laboratory Evidence Office. Duties of the Evidence Office include receiving drug evidence from law enforcement agencies, maintaining chain of custody records, assigning samples to chemists, producing certificates of analysis for review by chemists.

Chemist III State Laboratory Institute, Drug Analysis Laboratory

March 1990-October 2000, January 2002-March 2009

\*Completed six week training course conducted by senior staff within the Department of Public Health Drug Analysis Laboratory.

\*Appointed Assistant Analyst by the Assistant Commissioner of Public Health, March 1990.

\*Responsible for the identification of drugs to determine violations of harmful and narcotic drug laws.

\*Trained in the use of complex analytical instrumentation, microscopes and balances for the purposes of drug analysis.

\*Compile and edit a periodic drug lab newsletter for distribution to law enforcement agencies

\*Developed a heroin study to track heroin purity throughout Massachusetts, 1999-2000

\*Attended the Drug Enforcement Administration's Forensic Chemist Seminar in McLean, VA June 1992.

\*Qualified as an expert witness in Massachusetts courts and U. S. District Court

\*Notary Public

\*Member Northeast Association of Forensic Scientists (NEAFS)

Assistant Deputy Superintendent, Plymouth County Sheriff's Department, MA

March 2001-September 2001. \*Responsible for operations of the Bureau of Criminal Investigation crime laboratory

\*Began comprehensive training in fingerprint analysis under the direction of a certified latent print examiner.

\*Completed training in Evidence Handling and Crime Scene/DNA considerations sponsored by the Massachusetts State Police at Cape Cod Community College, June 2001

\*Attended symposium for Automated Fingerprint Identification System May 2001

Research Technician, Theobald Smith Research Institute, Boston, MA, 1989-1990

\*Worked in the newborn screening division of the Department of Public Health to determine the seroprevalence of HIV in newborns.

\*Provided technical assistance for the journal article "Early diagnosis of HIV infection in infants by detection of IgA HIV antibodies" published in The Lancet 1990.

\*Provided technical assistance under the direction of Dr. Rodney Hoff for the abstract "Seroprevalence of HTLV-1/2 and HIV 1 in intravenous drug users in Boston"

# Curriculum Vitae

Daniela Frasca

## Education

**Boston University School of Medicine, Boston MA**

*Currently enrolled in the Biomedical Forensic Science MS Program*

**Suffolk University, Boston, MA**

*Graduated in 05/1996 and received a Bachelor of Science in Biochemistry*

## EXPERIENCE

**Massachusetts State Laboratory Institute/DPH, Jamaica Plain, MA** 01/2001 – present

Drug Laboratory: Chemist II

- Analysis of all substances by chemical screening, microscopy, and instrument confirmation to determine the presence of drugs for law enforcement agencies in the Commonwealth of Massachusetts.
- Appointed assistant analyst on January 29, 2001 by the Assistant Commissioner of DPH
- Completed four weeks of training in drug analysis under the supervision of senior chemists.

**Quest Diagnostics Incorporated, Cambridge, MA**

09/1996 – 10/2001

Department of Toxicology: Medical Technologist I

- Handles comprehensive toxic analysis, therapeutic drug monitoring, forensic drug screening, and compound ID's of biohazard samples utilizing standard operating procedures in clinical toxicology.
- Entered data and interpreted results for reporting
- QC/QA of multiple analytical instrumentation as well as maintenance
- Completed 60 days of training under the supervision of doctorate level toxicologists.

## Additional Training

**Northeastern Association of Forensic Scientists**

Designer Drugs	Clandestine labs
Agilent Instruments and Software	Digital Photography

**McCrone Research Institute**

Forensic Polarized Microscopy  
Polarized Microscopy of Illicit Drugs and Excipients

**Massachusetts State Laboratory Institute**

Expert Witness  
Raman Spectroscopy

## Associations and Programs

- Northeastern Association of Forensic Scientists (NEAFS) 2001 - present
- The International Association of Forensic Toxicologists (TIAFT) 2003 - present
- The International Association of Therapeutic Drug Monitoring And Clinical Toxicology (IATDMCT) 2003 - present
- Massachusetts State Science Fair Judge 2000 - present
- Middle School State Science Fair Judge 2006 - present
- Volunteer Science Project Mentor/Tutor for the TTT Mentor Program 2003 - present

# Curriculum Vitae

Kate A. Corbett

## Education

Bachelor of Science Degree, CHEMISTRY May 2003

MERRIMACK COLLEGE

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

---

## Employment

Chemist II State Laboratory Institute (March 2008-Present)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

Chemist I State Laboratory Institute (2005-March 2008)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005

Research Associate (September 2003 - August 2005)

SENSOR TECHNOLOGIES, INC - Shrewsbury, MA

- Prepared chemistries used in making sensor beads
- Generated and examined sensors employing fluorescence spectroscopy
- Performed protein, dye and sugar assays using UV/VIS spectrophotometry
- Carried out titrations on ricin using fluorescence correlation spectroscopy
- Statistical analysis of experimental data

Intern (March 2003 - August 2003)

MASSACHUSETTS STATE POLICE CRIME LABORATORY - Sudbury, MA

- Assisted in the gathering of case files to fulfill the National Institute of Justice's No Suspect Backlog Reduction Grant
- Observed in the Evidence, Criminalistics, DNA, Drug, Trace, Toxicology, and Bomb/Arson Units

## Curriculum Vitae

Lisa A. Glazer

### Education

#### **Bachelor of Science Degree, CHEMISTRY January 2006**

UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

#### **Bachelor of Science Degree, FORENSIC SCIENCE January 2006**

UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus, Biology, Criminal Justice and Forensic Science courses

---

### Employment

#### **Chemist I, II State Laboratory Institute (May 2007-Present)**

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2007.

#### **Laboratory Technician I (August 2006 – May 2007)**

University of Connecticut Chemistry Department - Storrs, CT

- Prepared unknowns, chemical reagents and supplies for undergraduate chemistry courses
- Set-up experiment demonstrations
- Properly disposed of hazardous waste from the experiments
- Made sure labs were being conducted safely
- Kept track of student laboratory paperwork, inventoried glassware and chemicals and helped clean glassware

#### **Intern (September 2005 – November 2005)**

CONNECTICUT STATE POLICE FORENSIC LABORATORY - Meriden, CT

- Worked on a Pyrolysis Gas Chromatography project
- Observed in the GSR testing, Forensic Biology, DNA, Questioned Documents, Black and White Photo, Latent Prints, Firearms, Trace Evidence and Color Photo Units

# Curriculum Vitae

**Peter Piro**

## **EDUCATION**

**Boston University**

**B.A. in Chemistry and Minor in Biology, 1989**

## **HONORS**

**Magna Cum Laude, 3.6 GPA**

**Graduated with Distinction in Chemistry**

**Valedictorian of the Chemistry Department**

## **EXPERIENCE**

### **Department of Public Health/State Laboratory Institute**

**Laboratory Supervisor I/Chemist III, II, I/ Assistant Analyst December 1991-Present**  
Supervise the operation and maintenance of the Gas Chromatography/Mass Spectrometry Laboratory. Train staff and coordinate schedules. Analyze controlled substances for State and Federal law enforcement agencies. Develop, oversee, and make improvements to the GC/MS laboratory's quality assurance/quality control (QA/QC) program. Serve as the Technical Supervisor of the Drug Analysis Laboratory. Responsible for planning and implementing Quality Improvement (QI) projects. Make recommendations for protocols and procedures by developing methods so work can be performed in an accurate and efficient manner. Qualified as an expert witness in Massachusetts courts and U.S. District Court.

### **Massachusetts Health Research Institute**

**Laboratory Technician September 1990-December 1991**

Researched the seasonal and special occurrences of DSP and PSP in shellfish samples harvested from coastal waters and Georges Bank using cELISA and bioassays.

## **TRAINING AND ORGANIZATIONS**

\* Completed a six-week training course by senior staff within the Department of Public Health Drug Analysis laboratory.

\* Appointed Assistant Analyst by the Assistant Commissioner of Public Health in February 1991, Notary Public since 1993.

\* Elected as a Regular Member to the Northeastern Association of Forensic Chemists on October 27<sup>th</sup> 1995 and a member of the Massachusetts Organization of State Engineers and Scientists.

\* Completed training in Mass Spectrometry given by the Food and Drug Administration/Forensic Chemistry Center on November 2002.\* Completed Mass Spectrometry Troubleshooting and Maintenance, Agilent Technologies, 2002\* Completed Restek GC/MS Training, 2011\*Completed DEA Forensic Chemist Training, Special Testing and Research Laboratory, 2011.

## Curriculum Vitae

Daniel Renczkowski

### Education

Degree: Bachelors of Science in Forensic Chemistry,  
May 2005 from Buffalo State College  
GPA: 3.84, Dean's List, Honor's Recognition  
American Chemical Society Undergraduate Award  
Phi Lambda Upsilon Membership

Related Coursework:	Analytical Chemistry	Physical Chemistry
	Organic Chemistry I and II	Instrumental Chemistry
	Biochemistry	Forensics Laboratory
	Chemistry of Criminalistics	Physical Evidence
	Anatomy	Physiology

### Employment

Massachusetts Department of Public Health Drug Analysis Laboratory

Chemist I (October 2005 – March 2008)

Chemist II (March 2008 – present)

- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff
- Successfully completed GC/MS training program
- Responsible for the identification of substances to determine violation of the Controlled Substances Act of the Massachusetts General Laws
- Responsible for maintenance and repairs of analytical instruments
- Responsible for quality control of analytical instruments and standards

### Related Experience

Niagara County Forensics Laboratory

Forensic Internship, January 2005

- Conducted research on the presumptive testing of saliva
- Conducted research on the identification and detection of lubricants
- Observed all aspects of the laboratory including drug analysis, firearms comparison, trace evidence, arson investigation, toxicology, and serology
- Daily use of FTIR microscope and DuraSamplerII
- Familiarized with GC/MS programs

## Curriculum Vitae

Nicole E. Medina

### Education

**Bachelor of Science, Chemistry (1995)**

Emmanuel College, Boston, MA

**Research Project: (1994)**

In-Vivo Mapping of Cocaine Metabolites in Biological Fluids

Conducted at Massachusetts State Police Crime Lab, Toxicology Department

---

### Employment

**Chemist II State Laboratory Institute (March 2008-Present)**

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substances and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

**Chemist I State Laboratory Institute (2004-March 2008)**

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis
- Successfully completed an eight week training in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005.

**Research Associate (September 2001 – October 2004)**

Wolfe Laboratories, Newton & Watertown, MA

**Laboratory Technician (January 1996 - April 1997)**

Gillette, Boston, MA

## Curriculum Vitae

### Annie Khan (Dookhan)

#### **Education:**

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.  
University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

#### **Experience:**

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

\*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.

\*Appointed Assistant Analyst by Assistant Commissioner of Public Health, January 2004.

\*Responsible for the identification of drugs to determine violations of harmful and narcotic drug laws.

\*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.

\*Maintenance and repairs of all analytical instruments.

\*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.

\* Responsible for the Quality Control/Quality Assurance program for the drug lab.

\*Notary Public.

\*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

\*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.

\*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.

\*Writing, revising and reviewing Standard Operating Procedures (SOPs).

\*Routine QC testing of products for the FDA.

\*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.

\*Calibration, preventive maintenance, QC and QA of analytical instrumentation.

\*Complete testing of chemicals for Vendor Validation Project for the FDA.

\*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### **Additional Training:**

Dept. of Justice – Forensics Professionals.

GLP/GMP course with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

#### **Association:**

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

## Curriculum Vitae

Hevis Lleshi

### Education

Boston University School of Medicine – Master of Science, Forensic Science  
University of South Florida – Bachelor of Arts, Clinical Psychology

### Related Coursework

Forensic Chemistry • Forensic Toxicology • Forensic Pathology • Forensic DNA Analysis  
Organic / Analytical Chemistry • Forensic Biology • Biochemistry • Forensic Trace Evidence

### Employment

March, 2011 – Present  
Chemist I, Massachusetts Department of Public Health,  
Drug Analysis Laboratory

- Appointed Assistant Analyst by Assistant Commissioner of Public Health, June, 2011
- Responsible for the identification of substances to determine violation of harmful and narcotic drug laws of the Commonwealth of Massachusetts
- Trained in the use of complex analytical instrumentation for the purpose of forensic drug analysis

### Additional Training and Laboratory Experience

- Completed ten-week training course conducted by Laboratory Senior Staff within the Department of Public Health, Drug Analysis Laboratory
- GC and GC/MS training with Restek
- Instrumental Forensic Chemistry/Toxicology Laboratory, Boston University, 2009
- Serology/Bloodstain Pattern Analysis Techniques, Boston University, 2009

Internship, MASSACHUSETTS STATE POLICE—MARINE SECTION, BOSTON, MA, 2008 – 2010

---

### Associations

- American Academy of Forensic Sciences (AAFS)
- Boston University Forensic Science Society (BUFSS)